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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,612	09/30/2003	Kenji Kasuga	108075-00119 4201 EXAMINER	
4372	7590 08/06/2004			
ARENT FOX KINTNER PLOTKIN & KAHN			HO, TU TU V	
1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036		ART UNIT	PAPER NUMBER	
			2818	

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions durine may be value under the proteins of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after the common of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after some of the common of the		Application No.	Applicant(s)	~						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Externation of time may be evaluate under the provision of 3 CFR 1.13(q). In no event, however, may a reply be timely filled  If the period for reply specified above is less habiting 100 days, a reply whitin the statadory minimum of lithing (30) days will be considered shrelly.  If the period for reply specified above is less habiting 100 days, a reply whitin the standary minimum of lithing (30) days will be considered shrelly.  If the period for reply specified above is less habiting 100 days, a reply whitin the standary priod will expire (50) (MONTH's fem the mailing date of this communication.  If the period for reply specified above is less habiting 100 days, a reply whitin the standary period will apply and will expire (50) (MONTH's fem the mailing date of this communication.  If the period for reply specified above is less habiting 100 days, a reply whitin the standary period will period above the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the period for reply specified above is less than thing date of the communication.  If the peri	Office Action Cummers	10/674,612	KASUGA, KENJI	<b>G</b> A						
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1) 23 Notice of References Cited (F10-032)	1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date	2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate	<b>152</b> \						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date <u>09/30/2003</u> .  5) Notice of Informal Patent Application (PTO-152)  6) Other:	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date <u>09/30/2003</u> .	· <del>-</del>	atent Application (FTC	J-1JZ)						

## **DETAILED ACTION**

- 1. This application is in condition for allowance except for the following formal matters:
  - Claim 21, line 10, "a third memory" which is unclear, and which should be "a third memory cell"
- Claim 1, line 4, "a first memory and a second memory alternately and adjacent to each other in a predetermined direction, wherein the second memory cells have", which is unclear, and which should be

"a first memory <u>cell</u> and a second memory <u>cell</u> alternately and adjacent to each other in a <u>the</u> predetermined direction, wherein the second memory cells <u>have</u> <u>has</u>"

## Allowable Subject Matter

2. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or render obvious a semiconductor memory device and a method of arranging memory cells for the memory device having all exclusive limitations as recited in claims 1, 8, 17, 21, 22, 23, comprising a bit line extending in a first direction, a first memory cell (MC1), a second memory cell (MC2), a third memory cell (MC3), and a non-cell region, the non-cell region being adjacent to the MC2, the MC3 being adjacent to the non-cell region, characterized in that: the MC2 is arranged in the first direction and has a geometric shape that is symmetric to the MC1 with respect to a second direction which is perpendicular to the first direction or that the MC2 has a mirror image relationship with respect to a plane which is

perpendicular to the first direction, and in that: the MC3 has an asymmetric geometrical relationship with the MC2 with respect to the second direction.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Any comments considered necessary by applicants should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

3. Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire TWO MONTHS from the mailing date of this letter.

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Copies of the references are not being furnished with this Office Action per MPEP § 707.05(a).
  - U.S. Patent 6,373,107 to Nikaido discloses a memory device having four-transistor cells.

Art Unit: 2818

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu-Tu Ho whose telephone number is (571) 272-1778. The examiner can normally be reached on 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID NELMS can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14

Tu-Tu Ho July 22, 2004

HOAI HO
PRIMARY EXAMINER